Bromine, in combination as a salt, is not only an anaphrodisiac, or an anæsthetic to the throat; it is a powerful general sedative. Bromide of potassium has generally been preferred; but the preference should probably be given to bromide of sodium, on account of the greater tolerance, on the part of the animal system, of soda-salts, which enter in large proportion into the composition of the tissues of the body. Bromide of potassium, in average daily quantities of about thirty-five grains, in two or three doses, in some mucilage or sugared water, produces a marked sedative effect on the sensory and motor nervous system and on the circulation. As an anæsthetic, it acts more on the internal than on the external integuments, and especially on the isthmus of the fauces, the pharynx, and the genito-urinary passages. The action, however, is not confined to these parts, but extends into the neighbouring regions; especially the œsophagus, larynx, and air-tubes. By this action, painful dysphagia, œsophageal contractions, and spasmodic cough, are calmed. Bromide of potassium acts equally on the nervous centres, as a contrastimulant. It relieves congestive headache, prevents or moderates convulsions, diminishes the excito-motor action of the cord, and relaxes tetanic contractions, while at the same time it restrains reflex action. Under the influence of the alkaline bromide, the action of the heart is moderated and rendered slow, turgescence of the capillaries is diminished, and fever is abated. Diuresis, if it have not already existed, appears on the cessation of febrile excitement. Perspiration, on the other hand, is arrested; and the formation of pus and mucus is diminished. The symptoms of *bromism* are almost exactly the opposite of those of *iodism;* hence bromine may be regarded and used as an antidote to iodine.—*British Medical Journ.*, Sept. 17, from *Bull. Gén. de Thérap.*, July 15 and 30, 1864.

9. *Alkaloids of Peruvian Bark.*—Mr. J. E. HOWARD invites increased attention (*Medical Mirror*, Sept. 1864) to the specific therapeutic effects of the several alkaloids contained in the Cinchonæ. He has been occupied for more than thirty years in the extraction of quinia and other products of these barks, and has largely exhibited the cheaper products with satisfactory results. It is a great desideratum to obtain a cheaper remedy than quinia, and one which shall at the same time be sufficiently powerful to be relied on. Mr. H. is now with this view employing the commercial *muriate of cinchonine*, and has no reason to doubt its efficacy, and though required in larger doses than the sulphate of quinia, it is still cheaper.

"*Cinchonidine* (which must not be confounded with cinchonine) is," says Mr. H., "an alkaloid which experience has led me to value highly. I have treated successfully with this alone the most fatal forms of intermittent fever occurring in this country, called in some districts 'the dead ague,' in which the external exacerbations of fever subside, but the spleen enlarges, and dropsy and death supervene. I may also mention that this must have been the alkaloid which cured the Countess of Cinchon, since the *Cinchona chahuarguera*, to which (by tradition) her cure is ascribed, is specially rich in this product. Moreover, the cases of intermittent fever reported in the *American Journal of the Medical Sciences*, as successfully treated by *quinidine*, were really treated by *cinchonidine*, as I have elsewhere shown.[1] The *real* relationship of *cinchonidine* is to *quinine*, and not to *cinchonine*, as its name unfortunately implies. I am much inclined to believe that cinchonidine produces less cerebral disturbance than quinine, and the late Dr. Royle (of East Indian celebrity), who, at my request, tried several experiments with it, concurred with me in this opinion. If this should prove to be the fact, it would surely be a very important one for the interests of humanity.

"*Quinidine* has, probably, some peculiarity in its action on the system; but this has to be ascertained. It is important that it should be understood that the (so-called) quinidine of commerce is more often wholly or in part cinchonidine.

"*Aricine* has given such discouraging results in my hands, that I have not ventured to employ it. I have been led to suspect emetic qualities in the accompanying yellow colouring matter. The importance of investigation of this alkaloid will appear in the following observations. * * *

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[1] See my "Quinologia" under the head of Cinchona Chahuarguera.

"In the 'Crown barks' generally *cinchonidine* may be regarded as predominating, though in one sort (the *Amarilla del Rey*), quinine is found in considerable quantity. In the 'Gray barks,' *cinchonine* is the prevailing element. In the red barks, quinine, cinchonidine, and cinchonine form a triply compound agency. In the Calisaya (which is employed, in part, for tinctures and decoctions), quinine is the ruling power. In addition to these serviceable barks, there is also a large importation of barks called Peruvian, which are utterly unserviceable, and which nevertheless pass into medical practice. I have shown that, after the time of Dr. Saunders, the spurious *quina nova* took the place of the genuine red bark, leading to the conclusion that fevers had increased in their severity, or else that the red bark was an inferior remedy. There has been more than a little of this imported even of late years. There are several kinds of Peruvian bark in which the only alkaloid is *aricine*, and yet these are rather in favour, and command good prices. I confess I pity the unfortunate consumers.

"It cannot surely be regarded as a matter of indifference whether the patient is absorbing *quinine*, *cinchonine*, *cinchonidine*, *quinidine*, or *aricine*, from the Peruvian barks, to which he is to trust for convalescence; or whether the *quinovic acid* be the alone bitter principle which he receives to promote his recovery, as will be the case if the bark (*quina nova* for instance) be that of a Ladenbergia instead of that of a Cinchona.

"To cut this knot, some propose to give only known preparations, such as citrate of iron and quinine: but then again it is said, and probably with truth, that the effect of the bark itself is somewhat different and, perhaps, better if the patient be so happy as to meet with the kind of bark which suits him. But then who is to secure this auspicious result?

"In treating intermittent fever, experience has led me to find the truth of what Briquet shows, that it is best to trust to the alkaloid *alone*, and to strike a blow with a sufficient quantity of this in order to arrest the disease. I do not, however, advocate giving at a single dose more than, say, five grains of sulphate of quinine, or an equivalent of the other alkaloids, and this repeated three times in twenty-four hours. In seeking to restore the normal state of the constitution after the fever is arrested, the citrate of iron and quinine is very useful; and unless some such treatment is pursued, the ague is very apt to recur, as I have known to happen through a simple shock to the nervous system; but, if the plan I have described be followed, there is no variety of this Protean malady (including what is called 'Brow Ague,' and other singular affections), which I have not found yield to the treatment. The remedy is so sovereign, that, in my opinion, the physician ought not to fail in arresting the paroxysms of intermittent fever, and this, if expense be an object, even without the exhibition of quinine."

MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

10. *Defects of Expression* (*by words, writing, signs*) *&c., in Diseases of the Nervous System.*—M. Broca has arrived at the conclusion that the faculty of speech resides in the left cerebral hemisphere, and not in the right. The evidence on which he bases this conclusion is supplied by autopsies. Recently, Dr. Hughlings Jackson has brought forward clinical evidence which points in the same direction. He has seen about seventy cases of loss or defect of speech with hemiplegia, and in all but one the hemiplegia was on the right side, indicating, of course, disease of the left side of the brain. This is certainly strange; and the fact that his investigations were quite independent of although subsequent to those of M. Broca renders it more striking. Dr. Jackson, however,